. Thanks are extended to Assistant Examiner Smith for the helpful interview on Wednesday, May 09, 2001 at about 11:00 AM. Counsel signed a form concerning such interview, acknowledging that no agreement was reached about allowability of explicit claims. However, the Examiner seemed properly impressed about the demonstration of the workability of applicant's invention. The Examiner indicated that he would carefully reevaluate the situation upon submission of this amendment.

The most urgent issue concerns the patentability of the presently sought claims 17-23 over the teachings of the Chadwell patent. At the interview, Counsel demonstrated that a laser having a wavelength in the visible range could serve as pointer light beam. Many remote control devices and other varieties of optical communication systems employ light waves which are not lasers because the conical shape of an ordinary light beam offers advantages. At the interview, counsel discussed such narrowness of a laser beam primarily in terms of the power of the beam, which can be expressed as Joules per square centimeter.

Counsel employed commercially available badges and a commercially available LD-6000 digitizer to show the workability of applicant's pioneer invention as defined in claims 17-23. Various items, such as keys, spectacles, glasses, golf balls, etc, when their hologramized badges were moved into the scanning laser beam, activated the audio alarm.

A golf ball having the hologramized badge on only a part of it could be placed in front of the scanning beam without activating the speaker, but if rotated so that the laser beam encountered the surface components selectively responsive to the laser beam, the audio alarm was sounded.

Computer-aided systems have been employed for preparing and archiving drawings for many small devices. However, "white boards" have been used for drawings of large objects [e.g. locomotives]. An industry has evolved for "digitizing" large drawings so that a type of compact disk could maintain the data needed for duplicating a large drawing. Such digitizer scans the drawing to detect each line, and to provide the digitized information, such as x and y axis data for location of each pixel having detectable darkness. At very

short range, the LD 6000 can detect each darkness [ lines, handwritten notes, etc.] even though the darkness is not a hologram, but merely a darkness on a white background. Thus the drawing, even with signatures and handwritten notes can be digitized for storage of the data. The overall process is analogous to the function of an electronic signature storage device used when a Federal Express package is delivered or a credit card signature preserved electronically at a check out counter. The LD 6000 and updated models apply to the storage of large drawings some of the principles used for storing data from a small signature zone.

In accordance with the Examiner's suggestion, some of the data available from the manufacturer of the demonstrated digitizer are submitted herewith. Lasesys Corporation marketed a model LD 6000 digitizer described in documents identified as Exhibit B, pages 1-3. This digitizer sends a very low wattage laser beam having an infra-red wavelength of 820 nm. as a beam scanning a tiny angle. LD 6000 has a receptor sensitive to the feedback light. Pages 4 and 5 of such Exhibit B provide a more detailed description of how an updated revision of LD 6000 is employed in digitizing large drawings so that they can be archived and then reproduced on a whiteboard, and/or modified using computer CAD programs. At the interview, the connotation that Chadwell's reference to CCDs suggested light, not radio signals, was mentioned. However, both light and radio-waves affect CCDs, as indicated by Applicant's Exhibit C. MIT used CCDs for radar meteorological research in the '40s. Optical CCDs are affected by radio waves of meteorological radar today. CCDs help when totalizing pulses of energy. Some cameras use CCDs, as shown in Exhibit C.

Counsel argues that his demonstration with various items and LD 6000 establishes the workability of applicant's concept that the combination of hologram and laser beam and monitor can expedite the search for a lost item having such hologram Applicant's concept is a significant pioneer invention of the type that hundreds of persons might be envious and essentially say "Why didn't I think of that?" Some of the inventions which the Examiner has dealt with have been at the growing edge of technology. The response of a hologram to a laser beam matched to such holograms has been known for decades. Laser research has cost billions of dollars. Thousands of golfers have been involved in such research.

All golfers know that a lost ball results in stroke penalties. A typical golfer is more concerned about the stroke penalties for a lost ball than the cost of the ball. Counsel is not a golfer and was unaware of such stroke penalty incentive for retrieving balls. The cost of replacement of a golf ball has helped to stimulate an abundance of patent applications pertinent to locating a golf ball.

Among the many researchers dealing with lasers there undoubtedly have been thousands of golfers who had an abundance of incentives for making the present invention. The Examiner should not ignore the fact that it was McLaughlin who made this invention and paid for the filing of the present invention and paid for the research leading to the successful demonstration seen by the Examiner on May 9, 2001. Accordingly the Examiner has evidence for nonobviousness which is significantly greater than is available for most patent applications.

The issue concerns the patentability of claims 17-23 over the teachings of Chadwell. Heretofore Counsel has acknowledged that Chadwell mentions infra-red light but clearly does not use the word "laser". As previously observed, many optical communication systems, such as remote control deices, employ general infra-red light instead of lasers. The Examiner has tended to retrospectively graft applicant's invention onto the Chadwell patent to create a hypothetical disclosure which is different from what was actually taught by Chadwell. Applicant cannot afford to appeal to the Federal Circuit Court, but feels that such court would not sustain the rejection of the presently sought claims 17-23 upon Chadwell. Of particular importance, the connotations of the total teaching of the Chadwell patent show that his vague reference to infra-red light was to ordinary infra red light and not to lasers. When the Chadwell patent application was filed in 1994, lasers were extremely well known; hence the word laser would have been used if that had been Chadwell's invention. Applicant used the DIALOG patent searching service prior to the filing of this case. If the Chadwell patent had used the word "laser" it would have been found in such prior-art search, and then would have been distinguished in applicant's specification. The Examiner seems to have ignored the absence of "laser" in the Chadwell patent. Applicant emphasizes that a laser beam can be patentably distinguishable from other beams of electromagnetic waves. Claims should be allowable as soon as the Examiner recognizes this critically important distinction of the word "laser" in each of applicant's claims.

Substantially all of the Chadwell disclosure stresses RADAR and the measurement of the distance to the ball. The Examiner's attention is particularly directed to Chadwell's flow sheet [Fig. 6] which requires the measurement of the time interval for the echo in order to measure distance, which is described as a RADAR measurement. Substantially all of the Chadwell specification is thus focused on RADAR. Chadwell's emphasis upon using radio waves and measuring the time interval for the echo from the signal makes it difficult to interpret the Chadwell disclosure. Moreover, more confusion is added by Chadwell's use of antenna and radio frequency waves for sensing the presence of a golf ball at short range. Chadwell makes some reference to light. Readers sometimes need to guess about whether Chadwell is discussing radio waves or light, because only trivial portions of the detailed description are unambiguously directed to the use of light.

In the amendment available at the interview, Applicant had a few pages of quotes of those portions of Chadwell's description which are not clearly directed to radio waves, but which *possibly might* be directed to the use of light, but which a casual reader might think were probably applicable to radio waves. Because the Examiner expressed a strong preference for "Marked up" data, a clean copy of Chadwell has been downloaded from the Internet, and is submitted as Exhibit E. The tiny amount of detailed specification unambiguously directed to light has DOUBLE lines in the margin. Those ambiguous portions which the cursory reader would probably assume were directed to radio waves but possibly might concern light are marked with a single line in the margin. Much of such marked up specification has no marginal notation because average readers would not deem it relevant to light.

Chadwell's disclosure makes an assumption that a golf ball having a coating of aluminum paint [or possibly iron paint] could respond to RADAR and/or a mine detector substantially as a golf ball having a magnetic iron core as disclosed by Valentino 5,132,622, all of the disclosure of which was incorporated by reference into the Chadwell disclosure at Col 3, Ins 41-50. Such assumption prompts some readers to interpret the Chadwell as a "paper patent" recommending concepts which are not practical. Whether the Chadwell disclosure should or should not be treated as a "paper" patent has trivial

relevance to the patentability issues herein, except as regards confirmation that it is ambiguous.

The inventor has moved to a retirement community, and is encountering medical expenses significantly greater than in the past. Financing the further development of the present invention will be substantially impossible unless one or more patents issue from this application. The inventor, counsel, and Richard Jenkins, Executive Vice-President and Treasurer of Lost Items Retrieval Systems, Inc, assignee of the present application, all have a far better understanding of the invention than they did when filing the application on January 21, 1999. They need the allowance of at least one application from this case in order to be able to move ahead with this project.

The function of the patent system is to recognize the intellectual property rights having sufficient value to merit the payment of royalties. The present invention exemplifies the type of invention which, without patent protection, could readily "dead-end" without prompt commercialization. Applicant already has risked funds for preparation and prosecution of this patent application and risked additional funds for the research equipment for confirming the workability of his concept of using a laser beam for retrieving a lost item. However, further funds will be needed for commercialization of the project. Patent protection seems to be essential for further funding. Patents are a species of property which generally have a negative value unless commercialized, so that Examiners can allow patent claims with confidence that the market, not the Examiner, will determine the value of the patent.

Counsel is fully convinced that the Examiner's position is untenable when contending that the electromagnetic wave teachings of the Chadwell patent prevent the allowance of claims distinguishing over Chadwell by the use of the word "laser". The power of a laser beam, expressed as Joules per square centimeter, is orders of magnitude greater than the Joules per square centimeter of a typical flashlight beam. A brief burst of laser beam can be used to weld aluminum, because the great number of Joules per square centimeter of the laser beam. Many laymen are familiar with the use of infra-red lamps for preserving the warmth in hamburger sandwiches at a fast food restaurant and recognize that

such infra-red beams are not suitable for welding aluminum. The wavelength of a laser beam has relevance for some purposes, but the important characteristic of a laser beam is generally its large Joules per square centimeter power.

Counsel insists that applicant never elected the method claims herein, and is prepared to appeal on this issue. Both method and article claims have been pursued in each action without any hint of an election. Only the consumer would directly infringe the method claims, which would have minimal value except as a bulwark to the article claims. Prosecuting an action for contributory infringement of the method claims, in the absence of the article claims, would be troublesome.

If the restriction requirement is repeated, then applicant would prefer to issue the article claims in this case and the method claims in the contemplated divisional application.

Chadwell makes no mention of a "hologram" as now required in each of claims 17-20. In Fig. 6, Chadwell shows square 62B which requires the monitoring of the "time lapsed" for the echo [described by Chadwell as RADAR] to return to the monitoring device. At lines 1-5 of column 6 of the Chadwell patent, the distance measurement to the golf ball is critical for identifying the direction in which the golf ball theoretically would be detected by the video display of the Chadwell handheld apparatus. Applicant's specification has no teaching concerning this critically important distance-measuring feature of the hand held embodiment of the Chadwell invention. Chadwell's "extended wings" embodiment uses continuous electromagnetic waves [apparently having a radio frequency of at least 500 Hz] instead of pulses of RADAR. It does not rely upon "reflection" but instead relies upon the "metal detector" approach by modifying the field when the field encounters metal.

Chadwell does not use the terminology pertinent to a "hologram" or a "laser", as now required by method claim 17. This new claim now requires that the hologram be "selectively responsive" to the laser beam, thus clearly distinguishing over the teaching of Chadwell. The Examiner criticized an alleged indefiniteness concerning wavelengths. Claim 17 has clarified the Markush group of wavelengths to eliminate any alleged indefiniteness while still aspiring to cover substantially the three general wavelengths cited by Applicant for atmospheric optical communication systems.

Claim 17 concerns the concept of preparing a badge having the hologram, affixing such badge to a portable item that might get mislaid [that is, temporarily lost, but the "temporarily" is an unnecessary word] and then using the monitor which directs the corresponding laser beam onto the badge having the material selectively responsive to the wavelength. Such concept was not taught by Chadwell. Such concept has been technologically feasible for many years. Claim 17 defines a method which is patentably distinguishable from all prior art methods.

Claims 18, 19, and 20 are dependent method claims, and correspond to similar earlier claims. Prompt indication of allowability of claims 17-20 is sought.

Article claim 21 has been revised to feature appropriate changes of terminology. Thus the outer surface of the item is first modified to provide components selectively responsive to the contemplated laser beam. Then the monitoring device directs the corresponding laser beam which complies with the Markush group of wavelengths. Dependent method claims 22 and 23 correspond to the similar dependent article claims which have been in the case since filing of the application

Restriction practice has varied significantly through the past 64 years that Counsel has been prosecuting patent applications, with greater emphasis today than in the past upon the happenstances of the Patent Office Classification System. When the patent term was for 17 years, there were an abundance of abuses based upon a multiplicity of patents, leading to the invalidation of patents under the judicial doctrine of double patenting. Few realms of law have as much bad law as double patenting. Courts have ruled that an applicant has the responsibility to correctly protect his property rights, and cannot shift the blame to the Patent Office. Some patents have been invalidated for double patenting even when it was the Patent Office which required restriction. Hence, an applicant who capitulates to a Patent Office restriction requirement does so at his own risk. If the Examiner requires restriction, applicant

However, counsel fees for contesting the restriction requirement could be sizeable. All things considered, applicant elects to not appeal if the restriction requirement is repeated. Desirably the Examiner will allow both article and method claims to issue in a single patent. If the Examiner repeats the restriction requirement, then Applicant contemplates promptly filing a divisional application [aspiring for simultaneous issue] for the other set of claims,

will gain no benefits, but must pay approximately \$1,000 more in Patent Office fees.

because both sets of claims are believed to be allowable.

If there had been an appeal concerning the restriction requirement, applicant would have noted that Sec. 811 of MPOP explains that the requirement for restriction "may be made at any time before final action in the case at the discretion of the examiner. This means the Examiner should make a proper requirement for restriction as early as possible in the prosecution, in the first action if possible, otherwise as soon as there is basis for a proper requirement develops. Before making a restriction requirement after the first action on the merits, the Examiner will consider whether there will be serious burden if restriction is not required."

In the present case, the method claims refer to the article, and the article claims refer to the method. It is difficult to imagine situations in which there would not be infringement of both. Accordingly applicant urges that all claims 17-23 issue from this application, but contemplate filing a division case if both types of claims are not allowed herein.

Substantially all of the arguments for claim allowability presented in earlier responses are also applicable to each of claims 17-23, and are deemed here reiterated.

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#### Index of Exhibits:

- A: Claim 17 with footnotes concerning basis for disclosure of words
- B. Data concerning LD-6000 Digitizer
- C. Data concerning CCDs
- D. Marked up copy of specification for establishing disclosure for claim 17
- E. Marked up copy of Chadwell concerning disclosure about infra-red

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